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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,423	04/09/2004	Thomas H. Walters	702.345	1221

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Devon A. Rolf
GARMIN INTERNATIONAL, INC.
1200 East 151st Street
Olathe, KS 66062

EXAMINER

NGUYEN, CUONG H

ART UNIT	PAPER NUMBER
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3661

MAIL DATE	DELIVERY MODE
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05/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/821,423

Applicant(s)

WALTERS ET AL.

Examiner

CUONG H. NGUYEN

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/02/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is the answer to the communication received on 5/02/2007, which papers have been placed of record in the file.
2. Claims 1-45 are pending in this application.

Response to Arguments

3. At first, the examiner submits that claim 1 is very broad, it claims about steps using both a GPS and a dead reckoning module to get a navigation's position. The examiner submits that cited references meet what the applicants claim.

Since claim 41 was not "explicitly" given an opinion (as argued), the examiner withdraws the Final Office Action mailed on 4/05/2007; however, the examiner already gave his opinion on claim 41 via the rationales provided for rejections of claim 42-45, and reflecting that interpretation of claim 41 as 2 devices are in 2 separate housings: in that interpretation, claim 41 is very well-known as an electronic apparatus with at least 2 devices in that apparatus (as an easy-to-recognized example, a pointer device on a computer can be a keyboard, and/or a mouse for the same moving function (by seeing a displaying cursor); a TV remote control has 2 separate housings: one housing to contain electronic chips, and circuitries that sending remote signals, and one housing only contains batteries; they are "integrated" on that TV remote control – therefore, integrating different components/modules/parts/devices in a system are not new; leave alone other particular/specific application(s) of that claimed device).

4. On page 23, 2nd para., the applicants argue that « ... Smith fails to suggest calibration... », the examiner submits that it is obvious that Smith suggests calibrating task for his system as applicants claiming about calibrating their system (by identify erroneous positional data... and eliminate such error" (admitting a task of (checking and/or comparison) has been made, see paper 5/3/07, page 23, line 10-11).

5. On page 24, 1st para., applicants argue about "...not only are GPS and dead reckoning functions separated, so too are the storage and display of navigation data." The cited references show functions are separated, and storage, and display are in separate modules.

6. On page 24, lines 17-19, the examiner's position is at the time of invention, retrieving data from one place, and displaying said data in another place is not new (as claim 12).

7. Applicants' arguments (5/02/2007) have been fully considered but they are not persuasive according to broad pending claims; since 2 devices (a triangulation positioning, and a dead reckoning positioning devices) can be separated as claimed; prior art already taught about each separately (and communications of those electronic devices are known); therefore, putting/integrating them together on a same chassis/platform for complementing each own functionalities is not an inventive concept. Claims 1, 15, and 23 are the broadest claims; they only suggest of using 2 devices (a 1st step is using a 1st device with a triangulation positioning functionality, a 2nd step is using a 2nd device with a dead reckoning positioning functionality/(a distance determining and a compass), and a 3rd step is locating a position using those 2 devices – using these 2 devices to locate a position are already well-known). The languages do not involve an inventive concept; therefore, the examiner needs to maintain previous rejections.

8. Applicants argue that the prior art does not teach "providing a second mobile device to communicate with the first mobile device and physically separable therefrom, the second mobile device including a dead reckoning functionality that includes an orientation component and a distance component. However, in claim 1 there are only required that 2 devices that can wirelessly communicate to each other (e.g., a communication of 2 stations on earth, or between 2 ships in Atlantic Ocean, etc.). Claim 1 does not require that the second device is a mobile device; and said second device not only require just a dead reckoning functionality (by using an open-ended word "including"). When arguing

about a dead reckoning device, and a triangulation positioning functionality device, the applicants argue that they must be physically separable (see pending claims 1, 10, 15, and 23); however, the examiner respectfully submits that the language of pending claims 31, and 37 do not express that idea. Further, making 2 devices integral or not has been a matter of choice because it has long been known that this is NOT an inventive concept to put 2 devices together or separate (the examiner disagrees because the applicant argues that 2 devices are separate (they MUST “communicate” to each other directly/indirectly and/or wire/wireless in the claimed “system”)). The constituent parts are so combined as to constitute a unitary whole. Webster’s New International Dictionary (2nd edition) defines “integral” as “(2) composed of constituent parts making a whole; composite; integrated.” In this pending application, all of the essential elements of the pending claims except integration of parts are found in the cited references. In arguing claims 37-39, the reason applicant uses is merely an intent of use (such as for best results).

9. Here are what/where the examiner takes into consideration while examining these pending claims:

A. In re Henley, 112 USPQ 56 (CCPA 1956)

The issue lies in what the combination of references makes obvious to the person of ordinary skill and not whether a feature of one reference can be bodily incorporated in the other too produce the subject matter claimed.

B. Lack of suggestion in references to combine – using hindsight:

Inn re Sheckler, 168 USPQ 716 (CCPA 1971)

While appellant urges that the rejection is sustainable only upon hindsight reconstruction of the prior art, we are not at all convinced that that is so. Like the board, we are persuaded that the differences in material or form between the subject matter claimed and prior art are such that

the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. It is, of course, not necessary that either Barnes or Dryden actually suggest, expressly or in so many words, the changes or possible improvements appellant has made. In re Rosselet, 52 CCPA 1533, 347 F.2d 847, 146 USPQ 183 (1965); In re Rauhen, 53 CCPA 937, 356 F.2d 125, 148 USPQ 554 (1966). All that is required to show obviousness is that the applicant "make his claimed invention merely by applying knowledge clearly present in the prior art. Section 103 requires us to presume full knowledge by the inventor of the prior art in the field of his endeavor." In re Winslow, 53 CCPA 1574, 1578, 365 F.2d 1017, 10020, 151 USPQ 48, 50-51 (1966). Under that test, appellant fails. No commercial success is claimed, nor is any other factor indicating non-obviousness shown to exist.

C. In re McLaughlin, 170 USPQ 209 (CCPA 1971)

The test for combining references is not what the individual references themselves suggest but rather what the combination of the disclosures taken as a whole would suggest to one of ordinary skill in the art.

D. In re Young, 159 USPQ 725 (CCPA 1968)

One cannot show non-obviousness by attacking the references individually where the rejection is based on a combination of references.

E. In re DeLisle, 160 USPQ 806 (CCPA 1969)

A reference is to be considered not only for what it expressly states, but for what it would reasonably have suggested to one of ordinary skill in the art.

F. In re Conrad, 169 USPQ 170 (CCPA 1971)

The test for obviousness under 35 U.S.C. 103 is not the express suggestion of the claimed invention in any or all of the references but what the references taken collectively would suggest.

G. Response to applicant's argument that there is no suggestion to combine in cited references: The examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re Simon, 174 USPQ 114 (CCPA 1972); In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA 1969).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 7-8, 10, 12, 17-22, and 37-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 1, 10, 17-22, and 37-40, Turetzky teaches:

- providing a handheld navigation device, a navigation device and an integral display (column 4, lines 59-67);

- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning component including a compass (see Turetzky et al., col. 4, lines 59-64, and col.3, lines 25-27);
- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted ((see Turetzky et al., col.3, lines 3842).

Turetzky does mention the use of an odometer.

Turetzky does not mention the use of triangulation.

However, Hakala et al. use that function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicants disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines 18-22). Further it is obvious that the PDA used by the prior art has a display device.

Turetzky et al. do not expressly disclose that the second device communicating to the first device, said 2nd device is separate from the first device.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al and Hakala et al in order to provide a claimed method with using both a dead reckoning device, and a triangulation positioning device to get a location of those devices since a user can conveniently obtaining reliable results.

B. As per claims 2 and 7, Turetzky teaches about providing a handheld “multifunction” device selected from a PDA device and a cell phone (see Turetzky et al., col. 4, line 59-67).

C. As per claim 8, it has been a well-known feature that a navigation system displaying a position of a device, which has an antenna receiver.

D. As per claim 12, it would have been obvious to one of ordinary skill in the art that any related data are from a vehicle that uses a navigation system.

E. As per claims 41-45, they teach that above devices (a first electronic device, and a second electronic device) can be separated (claim 41 merely indicates that a 1st device, and a 2nd device are separable), and they may use cradles; these claimed steps are very well-known in many electronic apparatuses due to their integration's characteristics; therefore above rationales and references are again applied.

11. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544).

A. As per claims 3 and 4, Turetzky does not teach the PDA having an integrated compass.

However, Hakala teaches it in column 11, lines 21-23.

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al and Hakala et al in order to provide a portable map viewing capable of indicating the current location having directions of a user.

B. As per claim 5, neither, Turetzky nor Hakala teaches the portable device including a rate gyro.

However, Hakala teaches the integrated compass that performs the claimed functions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to substitute any means for another means (i.e., an integrated compass) in order to reduce costs, and may improve functionalities.

12. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and further in view of Horvitz et al (US Pat. 6,601,012).

Turetzky does not teach a PDA having an accelerometer.

However, Horvitz teaches that a PDA having an accelerometer (see Horvitz, col. 10, lines 40-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al., Hakala et al., and Horvitz et al in order to provide a portable map having an accelerometer capable of indicating the current location of the user.

13. Claims 9, 13-16, 19-22, and 23-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), and in view of DeLorme et al (US Pat. 6,321,158).

A. As per claims 9 and 34, Turetzky does not expressly disclose that the PDA performing a route calculation (see Turetzky, "A cellular telephone or other mobile device can display, either visually or otherwise, the user's location, the user's location on a map, a route or part of a route between the user's location and the desired destination, or any number of things that can be used for location services.").

However, DeLorme also teaches it in abstract.

Therefore, it would have been obvious to one of ordinary skill in the art to combine Turetzky et al , Hakala et al., and DeLorme et al in order to provide a portable map/a PDA with route calculating capabilities for conveniences of using a device with many different functionalities.

B. As per claims 13 and 14, Turetzky does not teach waypoints, planned route or points of interest.

However, DeLorme suggests a device with those functions in column 10.

C. As per claims 15, 23, 26, 30-33, 35 and 36, Turetzky teaches:

- providing a first handheld navigation device, the first navigation device and an integral display (see Turetzky, col. 4, lines 59-67);
- providing a second navigation device to communicate with the first navigation device, the second navigation device including a dead reckoning positioning components (see Turetzky, col. 4, lines 59-64 and col. 3, lines 25-27);
- resolving a position of the first and the second navigation devices, wherein resolving the position includes using the one or more dead reckoning positioning components to determine the position when the triangulation positioning functionality is interrupted (see Turetzky, col. 3, lines 38-42).

Turetzky does not mention the use of triangulation.

However, Hakala et al. use that function (see Hakala et al., claim 3).

It is also obvious to one of ordinary skill in the art that any navigation system needs at least three satellites (triangulation) to work properly in the position detection (applicant's disclosure -page 1, lines 27-28, page 2, lines 1-11, page 3, lines 18-22). Further it is obvious that the PDA used by the prior art has a display device. Turetzky does teach including the navigation data including cartographic data including a number of locations and data indicative of thoroughfares of a plurality of types.

DeLorme also teaches that limitation in column 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

D. As per claim 16, Turetzky does teach both devices to communicate with one another.

However, DeLorme teaches it in column 8, lines 60-64.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine Turetzky et al., and DeLorme et al. in order to provide a portable map viewing capable of indicating the current location of the user.

E. As per claim 24, it would have been obvious to one of ordinary skill in the art to use a rate gyro or accelerometer in a navigation system in order to be more accurate (applicant's disclosure -page 10, lines 8-13).

F. As per claim 25, it would have been obvious to one of ordinary skill in the art to have at least a dead reckoning including at least an odometer, a speedometer, a differential wheel sensor and a compass in order to work properly (applicant's disclosure -page 3, lines 8-22).

G. As per claim 27, Turetzky does not teach the PDA performing a route calculation. However, DeLorme teaches it in abstract. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide a portable map viewing capable of indicating the current location of the user.

H. As per claim 28, Turetzky teaches providing a handheld multifunction-device selected from a group of a PDA enabled device and a cell phone enabled device (see Turetzky et al., col. 4, lines 59-67).

I. As per claim 29, it obvious to one skill in the art to use the PDA to communicate wirelessly to any other device in order to provide flexibility to the user.

J. As per claims 37-38, and 19-20:

The examiner respectfully withdraw the allowance subject matter of claims 37-40 (given by a prior examiner) with the above reason for “includes a cradle for a device”, and using “software” for these 2 devices (software/firmware already embedded/programmed in those devices’ ICs). Claiming that using “software” and “cradle” for electronic devices are not inventive concepts.

a. Per claims 19, and 37: Claims 19, 37 contain those extra well-known features suggested by prior art (what claim of using a 2nd device is merely a dead-reckoning device; note that “including a cradle” does not change/effect anything to the claimed steps of a method claim 37.

b. Per claims 20, and 38: Claims 20, 38 are merely suggested a selection of 2 available devices to have a better position data. This claim only requires to recognize/determine which device to use from the two: a dead reckoning device, and a triangulation positioning device. A very well known step of YES or NO is merely required from a user for “selection”.

c. Per claims 21, and 39: Claims 21, 39 are merely confirmed what happens in claim 37; as best interpreted, it is a duplication of its parent claim (claim 37). In another word, this claim merely requires the use of a triangulation positioning device, and a dead reckoning device (producing dead reckoning data).

d. Per claims 22, and 40: Claims 22, 40 are merely required further limitations of “tracking a device’s location” (e.g., a current location of a vehicle), and “providing visual and audio route guidance” (i.e., a GPS screen); these limitations are already very fundamental in the claimed vehicle navigation field.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Turetzky et al (US Pat. 6,529,829), in view of Hakala et al (US Pat. 6,452,544), further in view of Smith et al. (US Pat. 6,374,179).

The rationales and references for a rejection of claim 10 are incorporated.

The applicants further claim that using one of the triangulation positioning and dead reckoning positioning functionalities to check/adjust/calibrate (see Webster's II New College Dictionary for a definition of calibration) the other one of the triangulation positioning and dead reckoning positioning functionalities.

Turetzky et al. disclose: "*Such a check block can have one characteristic of the signal checked, can have multiple characteristics to check, or can select from one or more characteristics to be checked, either automatically or manually selected, depending on the design or desires of the user.*" (see Turetzky et al., col. 6 lines 21-25); this "check" clearly suggests a signal check for cross/auto-correlation between devices.

Turetzky et al. do not disclose that 2 claimed devices can calibrate each other.

However, Smith et al. clearly discloses that: "*As shown in FIG. 7, when an application 212 is brought on-line or made active, it registers with position service module 202 by sending request position session module signal 302 to position service module 202. In effect, application 212 is requesting composite of position data 240 from position service module 202. In request position session module signal 302, application 212 can include position data criteria (i.e. "special needs"), for example, application specified frequency of updating of position data, application specified accuracy of position data, type of position data, one or more components of composite of position data, resolution of composite of position data, position data from one or more particular navigational position sources 208, and the like.*" (see Smith et al., col. 6 line 66 through col. 7 line 11); this disclosure suggests a calibration of a component by selecting another available component as standard.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to combine Turetzky et al., Hakala et al., and Smith et al. using one of the

triangulation positioning and dead reckoning positioning functionalities to adjust the other one of the triangulation positioning and dead reckoning positioning functionalities for the advantage of using these available and well-known technologies to supplement each other (triangulation positioning and dead reckoning technologies) to always have a good compatible and backup device.

Conclusion

15. Pending claims are not patentable; accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

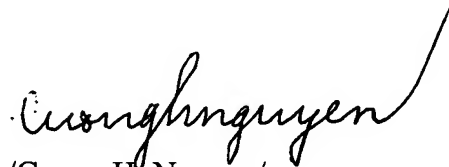
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose tel. number is 571-272-6759 (email address: cuong.nguyen@uspto.gov). The examiner can be reached on 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.


/Cuong H. Nguyen/
Primary Examiner, Art Unit 3661